

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAJENDRA KUMAR
and ALAN H. KARP

Appeal No. 96-2693
Application 08/018,972¹

ON BRIEF

Before JERRY SMITH, FLEMING, and HECKER, Administrative Patent Judges.

HECKER, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of
claims 1 and 3 through 12. Claims 13 through 20 have been

¹ Application for patent filed February 18, 1993.

allowed. Claim 2 has been canceled.

Appellants' invention relates to a technique for optimizing performance of a portable software program for use on different computers. The invention enables a single version of the software to execute at its optimal speed on each of the different computers. It can survive hardware changes and computer system upgrades.

On page 4 of the specification and Figure 1, Appellants disclose that the portable software queries a computer at 10 for its hardware attributes at run-time. Once the software knows the hardware attributes of the computer, the software optimizes at 12 at least a portion of the code of the software. Once optimized, the code may be executed at 14 by the computer.

Independent claim 1 is reproduced as follows:

1. A method for improving efficiency of execution of a portable application program by different computers, said method comprising the steps of:

(a) reading, by the portable application program at run-time for the portable application program in one of the different computers, at least one hardware attribute of the one of the different computers from a hardware attributes storage area internal to and associated with the one of the

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different computers by executing a load hardware attribute instruction within the portable program;

(b) optimizing, by the portable application program, performance of at least a portion of the portable application program for the one of the different computers based on the at least one hardware attribute read in step (a); and

(c) thereafter executing at least the portion of the portable application program optimized in step(b).

The references relied on by the Examiner are as follows:

PKZIP Create/Update Utility Version 2.04c, December 28, 1992
(PKZIP).

The Microsoft Windows Resource Kit, 1992 Microsoft Corporation
(MWRK).

Claims 1 and 5 through 12 stand rejected under 35 U.S.C.
§ 102 as being anticipated by PKZIP Create/Update Utility
Version 2.04c.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103 as
being unpatentable over PKZIP Create/Update Utility Version
2.04c in view of The Microsoft Windows Resource Kit.

Rather than repeat the arguments of Appellants or the
Examiner, we make reference to the brief and the answer for
the respective details thereof.

OPINION

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After a careful review of the evidence before us, we affirm the 35 U.S.C. § 102 and 35 U.S.C. § 103 rejections. It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. See In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). "Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984), *cert. dismissed*, 468 U.S. 1228 (1984), citing Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983).

Appellants argue on page 7 of the brief that PKZIP detects only one [hardware] attribute while Appellants' claims 1 and 7 claim "reading at least one hardware attribute". As pointed out by our reviewing court, we must first determine

the scope of the claim. "[T]he name of the game is the claim." In re Hiniker Co., 150 F.3d 1362, 1369, 47 USPQ2d 1523,1529 (Fed. Cir. 1998). While "only one" is not the same as "at least one", we find that "only one" meets the scope of the claim language of "at least one".

Appellants argue on page 7 of the brief that claims 1 and 7 both claim "reading ...from a hardware attributes storage area", and that PKZIP does not teach where the CPU type is being read from. The Examiner replies on pages 5 and 6 of the answer that it is inherent in how PKZIP operates. We find that the CPU type (i.e. attributes) must be stored in a CPU storage area in order for PKZIP to "detect what type of CPU it is being run on" (PKZIP at page 3).

Appellants further argue that claims 1 and 7 both claim "reading...at run-time...hardware attribute...by executing a load hardware attribute instruction" and that PKZIP does not teach or disclose executing a load hardware attribute instruction. Appellants state "But no such instruction exists in the 80x86 instruction set." (brief at top of page 8). We find that no such instruction is required to exist in the

80x86 CPU. Appellants' disclosure recites that the claimed portable program 20 contains the Load Hardware Instruction 22 (page 7 lines 20, 21 and Figure 2). Just as Appellants' claimed program contains the Load Hardware Instruction, so must the PKZIP program in order to detect the CPU attributes.

In the last paragraph of page 8 of the brief, Appellants indicate that "[c]laims 7, 11 and 12 further recite that 'the hardware attributes storage area being a non-volatile, semiconductor memory device or digital logic hardwired at fabrication'". They go on to argue that "PKZIP does not disclose how CPU type is being determined. ... Therefore, it is inherent that PKZIP does not disclose the storage area for hardware attributes, much less the type of storage area." We agree with the Examiner that it is inherent in PKZIP, in determining the CPU type, PKZIP is relying on a non-volatile semiconductor storage area of the CPU to obtain the CPU's attributes, otherwise the CPU would not be able to remember(e.g. memory) and respond with its attributes.

Therefore, upon considering PKZIP as a whole, we find that PKZIP does disclose the method of claims 1 and 7. Since

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claims

5 through 12 stand or fall with claims 1 and 7 we find that PKZIP anticipates these claims as well.

The Examiner has set forth a ***prima facie*** case of obviousness under 35 U.S.C. § 103 for claims 3 and 4. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. In re Sernaker, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983).

With regard to the rejection of claims 3 and 4 under 35 U.S.C. § 103 as being unpatentable over PKZIP in view of The Microsoft Windows Resource Kit (MWRK), Appellants argue at the bottom of page 9 of the brief that the teachings of the prior art itself should suggest the claimed subject matter and that the Examiner's prior art does not suggest the claimed invention. The Examiner states in the final rejection that one of ordinary skill in the art would know that the type of

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CPU (as determined by PKZIP) is not the only significant hardware attribute of a computer system. As taught by MWRK, plural hardware attributes should be determined before deciding the operating mode of the MWRK software. On page 63, MWRK automatically runs on a standard mode or enhanced mode after determining whether the system has an 80286 CPU and 256K of free conventional memory and 192K of free extended memory or an 80386 CPU and 2 megabytes of memory (256K of free conventional memory and 1024K extended memory). Thus, just as plural hardware attributes are determined before selecting the MWRK mode of operation, the Examiner reasons that determining plural hardware attributes would further enhance PKZIP in optimizing itself. PKZIP itself teaches the use of detecting plural attributes as noted on page 1, i.e. "80386 CPU detected, XMS version 2.00 detected, Novell Netware version 3.11 detected, DPMS version 0.90 detected".

With regard to Appellants' claim 4 limitation that "at least one of the plurality of hardware attributes is associated with cache memory resources", the Examiner notes

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that MWRK teaches determining the CachedFileHandles. On page 184, MWRK teaches this entry to keep a number of files open, "ensuring optimal performance".

In view of the foregoing, the decision of the Examiner rejecting claims 1 and 5 through 12 under 35 U.S.C. § 102 and claims 3 and 4 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Jerry Smith
Administrative Patent Judge)

Michael R. Fleming)
Administrative Patent Judge) APPEALS AND

Stuart N. Hecker)
Administrative Patent Judge)

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Records Manager
Legal Department, 20B0
Hewlett-Packard Company
P.O. Box 10301
Palo Alto, CA 94303-0890